



**United States  
Department of  
Agriculture**

**Agricultural  
Marketing  
Service**

**Fruit and  
Vegetable  
Division**

**Fresh  
Products  
Branch**

# **United States Standards for Grades of Fresh Plums and Prunes**

**Effective June 30, 1973**  
*(Reprinted - January 1997)*

# United States Standards for Grades of Fresh Plums and Prunes <sup>1</sup>

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## **Grades**

### **§51.1520 U.S. Fancy.**

"U.S. Fancy" consists of plums or prunes of one variety which are well formed, clean, mature but not overripe or soft or shriveled; which are free from decay, sunscald, heat injury, sunburn, split pits and hail marks, and free from damage caused by broken skins, growth cracks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means.

(a) Italian type prunes shall be well colored and, unless otherwise specified, shall be not less than 1-1/4 inches in diameter. (See §51.1525.)

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<sup>1</sup>Packing of the product in conformity with the requirements of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act or with applicable State laws and regulations.

**§51.1521 U.S. No. 1.**

"U.S. No. 1" consists of plums or prunes of one variety which are well formed, clean, mature but not overripe or soft or shriveled; which are free from decay and sunscald, and free from damage caused by broken skins, heat injury, growth cracks, sunburn, split pits, hail marks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means.

(a) Italian type prunes shall be fairly well colored and, unless otherwise specified, shall be not less than 1-1/4 inches in diameter. (See §51.1525.)

**§51.1522 U.S. Combination.**

"U.S. Combination" consists of a combination of U.S. No. 1 and U.S. No. 2 plums or prunes:

**Provided,** That at least 75 percent, by count, meet the requirements of U.S. No. 1 grade. (See §51.1525.)

**§51.1523 U.S. No. 2.**

"U.S. No. 2" consists of plums or prunes of one variety which are not badly misshapen, which are clean, mature but not overripe or soft or shriveled; which are free from decay and sunscald, and free from serious damage caused by broken skins, heat injury, growth cracks, sunburn, split pits, hail marks, drought spots, gum spots, russeting, scars, other disease, insects or mechanical or other means. (See §51.1525.)

**Unclassified**

**§51.1524 Unclassified.**

"Unclassified" consists of plums or prunes which have not been classified in accordance with any of the foregoing grades. The term "unclassified" is not a grade within the meaning of these standards but is provided as a designation to show that no grade has been applied to the lot.

**Tolerances**

**§51.1525 Tolerances.**

In order to allow for variations incident to proper grading and handling in each of the foregoing grades, the following tolerances, by count, are provided as specified:

**(a) U.S. Fancy and U.S. No. 1 -- (1) For defects of plums or prunes other than Italian type prunes at shipping point.**<sup>2</sup> 8 percent for fruit which fails to meet the requirements of the specified grade: **Provided,** That included in this amount not more than 4 percent shall be allowed for defects causing serious damage, including in this latter amount not more than one-half of 1 percent for fruit which is affected by decay.

**(2) For defects of plums or prunes other than Italian type prunes en route or at destination.** 12 percent for fruit which fails to meet the requirements of the specified grade: **Provided,** That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects;

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<sup>2</sup>Shipping point, as used in these standards, means the point of origin of the shipment in the producing area or at port of loading for ship stores or overseas shipment, or, in the case of shipments from outside the continental United States, the port of entry into the United States.

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for decay.

**(3) For defects of Italian type prunes at shipping point.**<sup>2</sup> Not more than a total of 12 percent of the fruit in any lot may fail to meet the requirements of the specified grade: **Provided**, That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 10 percent for prunes which fail to meet the color requirement;

(ii) 10 percent for prunes which fail to meet the minimum diameter requirement;

(iii) 8 percent for prunes which fail to meet the remaining requirements of the grade: **Provided**, That not more than one-half of this amount, or 4 percent, shall be allowed for defects causing serious damage, including in the latter amount not more than one-half of 1 percent for decay.

**(4) For defects of Italian type prunes en route or at destination.** Not more than a total of 18 percent of the fruit in any lot may fail to meet the requirements of the specified grade: **Provided**, That included in this amount not more than the following percentages shall be allowed for the defects listed:

(i) 12 percent for permanent defects including therein not more than 10 percent which fail to meet the color requirement, 10 percent which fail to meet the minimum diameter requirement, and 8 percent which fail to meet the requirements of the grade because of other permanent defects;

(ii) 6 percent for defects causing serious damage, including therein not more than 4 percent for serious damage by permanent defects and not more than 2 percent for decay.

**(b) U.S. Combination and U.S. No. 2 -- (1) For defects at shipping point.**<sup>2</sup> 8 percent for fruit which fails to meet the requirements of the specified grade: **Provided**, That included in this amount not more than 4 percent shall be allowed for sunscald, decay or serious damage by insects or heat injury, including in this latter amount not more than one-half of 1 percent for decay.

**(2) For defects en route or at destination.** 12 percent for fruit which fails to meet the requirements of the specified grade: **Provided**, That included in this amount not more than the following percentages shall be allowed for defects listed:

(i) 8 percent for permanent defects including therein not more than 4 percent for sunscald, or serious damage by insects or heat injury; and,

(ii) 2 percent for decay.

(3) When applying the tolerance for the U.S. Combination grade individual packages may have not more than 10 percent less than the percentage of U.S. No. 1 required: **Provided**, That the entire lot averages within the required percentage. (See §51.1526.)

#### **Application of Tolerances**

##### **§51.1526 Application of tolerances.**

The contents of individual packages in the lot, based on sample inspection, are subject to the following limitations:

(a) A package may contain not more than double any specified tolerance except that at least two defective and two off-size specimens may be permitted in any package: **Provided**, That the averages for the entire lot are within the tolerances specified for the grade.

#### **Standard Pack**

##### **§51.1527 Standard pack.**

**(a) Packing.** (1) All packages shall be tightly packed or well filled, according to the approved and

recognized methods.

(2) The plums or prunes in the top layer of any package shall be reasonably representative in quality and size of those in the remainder of the package.

(3) Four-basket crates. Four-basket crates shall not be packed more than three layers deep.

(i) The arrangement of the bottom layer shall be one row less one way, and may be one row less each way than the arrangement of the top layer; the arrangement of the middle layer may be the same as the top layer, or may be one row less one way than the arrangement of the top layer.

(ii) In the 3-1/2 -- 4 x 5 and 3-1/2 -- 4 x 4 packs the face of each half of the crate shall be packed as a unit, with no shim between the two baskets.

**(b) Marking.** (1) The size of plums or prunes shall be marked on each package, and shall be indicated in terms of minimum diameter, or number of fruit per package, or in accordance with the arrangement of the top layer of fruit in the package or subcontainer, or in terms of the four-basket crate designation for fruit of equivalent sizes. Size may also be shown in terms of maximum number of fruit for a specified weight, such as "8 per pound," "6.4 per pound" or "7-2/3 per pound."

**(i) Four-basket crates.** The size of plums packed in four-basket crates shall be indicated in accordance with the arrangement in the top layer of the baskets, as follows: 6 x 6, 5 x 5, or 4 x 4 (square packs); 5 x 6, 4 x 5, or 3 x 4 (offset packs); 3-1/2 -- 4 x 5, 3 -- 4 x 5, 3-1/2 -- 4 x 4, or 3 -- 4 x 4 (diagonal packs).

**(ii) California peach boxes, lug boxes and small consumer packages.** In layer-packed California peach boxes or lug boxes, and in small consumer packages, the count of the entire contents shall be marked on the package. The number of plums or prunes in California peach boxes or lug boxes shall not vary more than 4 from the number indicated on the package.

**(iii) Face and fill packs in cartons and lug boxes.** In face and fill packs in cartons and lug boxes the number of rows in the face shall be marked on the package, as "6 row", "8 row", etc.

**(c) Sizing.** (1) Not more than 5 percent, by count, of the plums or prunes in any package may vary more than one-fourth inch in diameter.

(2) When size is indicated in terms of minimum diameter, not more than 5 percent, by count, of the fruit in any package may be smaller than the size marked.

**(d) Tolerance for standard pack.** In order to allow for variations incident to proper sizing and packing, not more than 10 percent, by count, of the packages in any lot may fail to meet the requirements for standard pack.

## **Definitions**

### **§51.1528 Well formed.**

"Well formed" means that the fruit has the shape characteristic of the variety. Doubles shall not be considered well formed.

### **§51.1529 Clean.**

"Clean" means that the fruit is practically free from dirt and other foreign material.

### **§51.1530 Mature.**

"Mature" means that the fruit has reached the stage of maturity which will insure a proper completion of the ripening process.

### **§51.1531 Sunscald.**

"Sunscald" means injury caused by the sun in which softening or collapse of the flesh is apparent.

### **§51.1532 Damage.**

"Damage" means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as damage:

- (a) Broken skins which are unhealed except those caused by pulled stems where the skin is torn only slightly within the stem cavity. (Healed skin breaks shall be considered scars);
- (b) Heat injury, sprayburn or sunburn:
  - (1) When the skin is blistered, cracked or decidedly flattened;
  - (2) When the normal color of the skin or flesh has materially changed;
  - (3) When there is more than one indentation; or,
  - (4) When an indentation exceeds three-sixteenths inch in diameter;
- (c) Growth cracks:
  - (1) When not healed;
  - (2) When more than one in number;
  - (3) When more than one-eighth inch in depth;
  - (4) When more than three-eighths inch in length if within the stem cavity; or,
  - (5) When more than one-fourth inch in length if outside of the stem cavity;
- (d) Split pit when causing any unhealed crack, or when healed and aggregating more than one-fourth inch in length, or when affecting the shape to the extent that the fruit is not well formed;
- (e) Scab or bacterial spot when cracked, or when the aggregate area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the aggregate area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;
- (f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-fourth inch in diameter;
- (g) Scale or scale marks when the aggregate area exceeds that of a circle one-fourth inch in diameter;
- (h) Scars, including those caused by hail, when the surface of the fruit is depressed more than one-sixteenth inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of scars the seriousness of which exceeds the maximum allowed for any one type:
  - (1) Dark or rough scars when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle three-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;
  - (2) Fairly light colored, fairly smooth scars when, in the case of Italian type prunes, the area exceeds that of a circle one-half inch in diameter; or when, in the case of other types of plums, the area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle five-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size.
  - (3) Light colored, smooth scars when, in the case of Italian type prunes, the area exceeds

one-twelfth of the fruit surface; or when, in the case of other types of plums, the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle seven-eighths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(4) Twig or limb scratches which are not well healed or which have an aggregate length of more than one-half inch; and

(i) Russeting which exceeds any of the following aggregate areas of any one type of russeting, or a combination of two or more types of russeting the seriousness of which exceeds the maximum allowed for any one type:

(1) Rough russeting when the area exceeds that of a circle one-fourth inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle one-half inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(2) Slightly rough russeting when, in the case of Italian type prunes, the area exceeds one-twelfth of the fruit surface; or when, in the case of other types of plums, the area exceeds that of a circle five-eighths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;

(3) Fairly smooth or smooth russeting when, in the case of Italian type prunes, the area exceeds one-twelfth of the fruit surface; or when, in the case of other types of plums the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle 1 inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size.

**§51.1533 Well colored.**

"Well colored," as applied to Italian type prunes, means that 95 percent of the surface of the prune is purple color.

**§51.1534 Fairly well colored.**

"Fairly well colored," as applied to Italian type prunes, means that at least three-fourths of the surface of the prune is purple color.

**§51.1535 Badly misshapen.**

"Badly misshapen" means that the fruit is so malformed or rough that its appearance is seriously affected. Doubles shall be considered badly misshapen, except that doubles of Italian type prunes which have approximately equal halves shall not be considered badly misshapen.

**§51.1536 Serious damage.**

"Serious damage" means any specific defect defined in this section; or an equally objectionable variation of any one of these defects, any other defect, or any combination of defects which seriously detracts from the appearance, or the edible or marketing quality of the fruit. The following specific defects shall be considered as serious damage:

(a) Broken skins which are unhealed when aggregating more than one-eighth inch in diameter, length or depth. (Healed skin breaks shall be considered scars);

(b) Heat injury, sprayburn or sunburn:

(1) When the skin is blistered, cracked or decidedly flattened;

(2) When causing any dark discoloration of the flesh;

(3) When there are more than two indentations;

- (4) When the aggregate area of indentations exceeds that of a circle three-eighths inch in diameter; or,
- (5) When causing noticeable brownish or darker discoloration over more than one-fourth of the fruit surface;
- (c) Growth cracks:
  - (1) When not healed and more than one-eighth inch in length or depth;
  - (2) When healed and more than three-sixteenths inch in depth;
  - (3) When healed and aggregating more than five-eighths inch in length if within the stem cavity; or,
  - (4) When healed and aggregating more than one-half inch in length if outside of the stem cavity;
- (d) Split pit when causing any unhealed crack, or when healed and aggregating more than three-eighths inch in length, or when affecting the shape to the extent that the fruit is badly misshapen;
- (e) Scab or bacterial spot, when the aggregate area exceeds that of a circle one-half inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the aggregate area exceeds that of a circle three-fourths inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;
- (f) Drought spots or external gum spots which have an aggregate area exceeding that of a circle one-half inch in diameter;
- (g) Scale or scale marks when the aggregate area exceeds that of a circle three-eighths inch in diameter;
- (h) Russeting and scars, including those caused by hail, when the surface of the fruit is depressed more than three-sixteenths inch, or when exceeding any of the following aggregate areas, or a combination of two or more types of russeting or scars the seriousness of which exceeds the maximum allowed for any one type:
  - (1) Dark or rough scars or rough russeting when the area exceeds that of a circle three-fourths inch in diameter on a fruit 2 inches in diameter or 4 x 4 size, or smaller; or when the area exceeds that of a circle one inch in diameter on a fruit larger than 2 inches in diameter or 4 x 4 size;
  - (2) Russeting and scars which are not dark or rough when the area exceeds one-fourth of the fruit surface.
- (i) Soft or overripe or shriveled plums or prunes;
- (j) Plums or prunes affected by decay; and
- (k) Plums or prunes affected by sunscald.

**§51.1537 Diameter.**

"Diameter" means the greatest dimension measured at right angles to a line from the stem to blossom end of the fruit.



## Metric Conversion Table

### §51.1538 Metric conversion table.

Inches	Millimeters (mm)
1/8 equals.....	3.2
1/4 equals.....	6.4
3/8 equals.....	9.5
1/2 equals.....	12.7
5/8 equals.....	15.9
3/4 equals.....	19.1
7/8 equals.....	22.2
1 equals.....	25.4
1-1/4 equals.....	31.8
1-1/2 equals.....	38.1
1-3/4 equals .....	44.5
2 equals .....	50.8
3 equals .....	76.2
4 equals .....	101.6